



**MARYLAND GREEN BUILDING COUNCIL
MEETING SUMMARY
LOWE HOUSE OFFICE BUILDING
22 MAY 2013**

Attendees:

Tom Liebel – MDGBC	Meg Andrews - MDOT
Stephen Gilliss – DGS	Mimi Wright - MDGBC
Darryn Jones - DBM	David Costello - MDE
David St. Jean - MEA	Joan Kowal - USM
Anja Caldwell – MDGBC	David Lever - PSCP
Caroline Varney- Alvarado - DHCD	Sean McGuire – DNR
Dan Baldwin – DGS	Laura Armstrong - MDE
Lauren Buckler – DGS	Ellen Robertson – DGS
Prescott Gaylord – MDGBC	Chantelle Green - DLS
Terry Martin – DNR	

Guests:

Bill Orr – Collaborative for High Performance Schools (CHPS)
Steve Nicholson – Fairfax County VA Public Schools
Karen Anderson - Montgomery County Public Schools
Larry Lovato – Crabtree Rohrbaugh Architects

I. Chairman Tom Liebel brought the meeting to order. Introductions of all attendees followed. He also introduced Prescott Gaylord, the newest appointed member of the Council. Prescott has been involved in green building construction for over 10 years.

II. Chairman Liebel asked for a motion to approve the meeting summary from the previous meeting held 4/24/2013. A motion was made and seconded and the meeting summary was approved.

III. Chairman Liebel introduced Bill Orr, the Executive Director for the Collaborative for High Performance Schools (CHPS). Tom noted that this presentation is timely given the State's billion dollar investment in public school construction and renovation.

A. Bill said that he has been interested in making Maryland a CHPS State. A year ago in Washington D.C. he met with 12 regional school districts which were interested in CPHS. He is here today to share information on CPHS and to gain knowledge on the process necessary to bring CHPS into use in Maryland.

B. CHPS is a 501 c3 non-profit founded in 1999, incorporated in 2002 and went national in 2008. They started before there was a LEED for Schools and saw a need for a system specifically for schools.

C. Indoor environment is the #1 priority of the CPHS rating system but it also includes the other main areas of concern including energy, water, site, materials and waste similar to LEED and the IgCC.

D. The program has a National Core Criteria which serves as the basis for regional or local versions.

1. California was the first to use it in 2002
 2. The system has prerequisites and mandatory requirements.
 3. It can be customized for local codes and regional priorities. Some of the state and regional modifications have helped spawn new criteria for the National Core Criteria.
 4. The process includes integrated collaborative design
 5. It also includes performance and operations metrics.
 6. 13 states are currently using versions of CHPS as an equivalent to LEED. The latest is Hawaii which has actually moved from LEED to CHPS exclusively.
- E. CHPS vs. LEED – Global Green USA compared them
1. Both intended to provide environmental and social benefit
 2. Open and transparent development process
 3. Comprehensive
 4. Acceptable metrics
 5. Field verification
 6. Third party verification
- F. CHPS recognizes that all states and districts deal with schools differently.
- G. Sean McGuire asked if they are seeing which is being used more in states with both. Bill said they don't have statistics on that except that as mentioned Hawaii has gone to CHPS exclusively.
- H. CHPS Verified Leader is the more stringent level and includes 3rd party design and construction reviews. Hawaii even added an 18 month performance period to verify performance before the certification is given.
- I. CHPS also emphasizes service during design and has open communication with CHPS specialists who are available during the design. They believe they are more accessible and provide much more immediate response than LEED.
- J. CHPS has only two levels.
1. CHPS Verified – which is approximately equivalent to LEED Silver
 2. CHPS Verified Leader – More robust. Closer to LEED Gold to Platinum
- K. Tom Liebel asked how CHPS is funded. Bill Orr said that it's a membership organization which generates income from memberships, fees for services (use of the system) and some grants.
- L. Bill Orr provided two sample schools which achieved CHPS and LEED scores.
1. Hampton Bay Middle School, New York. This was the first CHPS school in NY and also achieved LEED Gold.
 2. High Tech High School in Chula Vista CA. (near San Diego). This was the first public Charter School to achieve CHPS. It also achieved LEED Gold and Energy Star.
- M. Bill Orr discussed the process for developing a local version of CHPS. Typically less than a year
1. Form a committee – 1-2 months – need 10 people minimum.
 2. Develop criteria – 3-6 months
 3. Review and approval - 3-4 months
 4. Launch – 2- 4 months
- Virginia's process started in September and was launched in the spring of the following year.
- N. To sum up, the benefits of CHPS are :
1. Rigorous National standard
 2. Local voice flexibility
 3. Includes a focus on existing schools
 4. Free membership for School Districts
 5. Quick responsiveness to the design team.
 6. Inclusive
 7. Cost effective
 8. More than a rating system

- O. Steve Nicholson of Fairfax County VA public schools shared his experience with CHPS.
1. The County was attracted to CHPS because it is for K-12 schools only – no community colleges or higher ed.
 2. They liked the focus on indoor environment and energy
 3. There was no LEED for schools when they started.
 4. The support from the CHPS organization helped get the criteria done in 3 months.
 5. Virginia is different from Maryland as no system is mandated as schools are bond funded and receive no state construction funds.
 6. They couldn't mandate its use but made it available to all districts.
 7. Fairfax County Schools has a large in house design, energy and commissioning staff.
 8. All new school projects in the County will be CHPS.
 9. They also liked that CHPS pushes educational displays in the schools so that younger generations will learn this at an early age.
 10. Capital and operational budgets are separate as they are in Maryland . CHPS metrics/scorecard helps to show results to the politicians.
 11. They also didn't want to re-invent the wheel so CHPS gave them a framework to start from.
 12. The process included 2 meetings a week, mostly conference call meetings. This was followed by 2 public national reviews. They focused on local and regional conditions.
 13. The VA system was also designed to be usable by the smaller school systems.
 14. They also have the ability to evolve and upgrade over time. More control than LEED allows.
 15. The finalized system was reviewed by Steve and the Fairfax County Green Ombudsman and was found to be equal to or to exceed LEED Silver. Fairfax projects of all kinds which are intended to be LEED Silver or equal entitles the projects to be given an expedited plans review process so it can save several months. All of their schools have to go through the county approval process. This is another advantage which can save several months.
 16. Tom Liebel asked if they could share the VA LEED comparison report. Steve Nicholson said he could provide contact with Ellen Egerton, the Green Ombudsman.
 17. Steve Nicholson said their process was so successful that he was asked to be on the CHPS Board.
- P. Karen Anderson of Montgomery County MD Schools also has looked at CHPS and shared her observations. She is the LEED specialist for the school system.
1. Montgomery County has 10 LEED schools so far all of which are LEED Gold.
 2. They used Bel –Pre School which is a preK- 2nd grade school.
 3. Grimm and Parker Architects, the Architect for the County's first LEED school was the Architect for Bel-Pre and reviewed and compared LEED and CHPS.
 4. The criteria were found to be robust.
 5. She likes Hawaii's operations requirements.
 6. CHPS also commissions plumbing, building envelope and acoustic none of which are done with LEED. They were not able to meet the acoustic requirements due to peculiarity of the school type/design which has doors between some classrooms.
 7. The CHPS schedule is somewhat more demanding as design credits need to be determined and submitted early in the process. At the same time, the transparency and ease of direct contact and working with CHPS staff was far better than LEED which is mostly written contact.
 8. Montgomery County likes the existing school provisions.
 9. The cost was less than LEED. CHPS fee was \$5,600 whereas LEED was \$15,000 for a recent school. Additionally LEED is more cumbersome.
 10. Karen said she could provide their comparison to the Council.

11. Bel-Pre earned 62 LEED points which achieves Gold. They also earned 62 CHPS points which is CHPS Verified but not Verified Leader. She believes it was one of their better projects and feels like the design community is getting up to speed on CHPS.
 12. Joan Kowal asked if CHPS would have to be certified for use in MD. Tom said that if it is done as the only rating for a school it would have to be approved. It could be used along side of LEED at any time.
 13. Karen Anderson said that she believes the VA version is definitely equivalent to LEED Silver.
 14. David Lever said that the National Core Criteria really makes it qualify for equivalence with LEED.
 15. Karen noted that there are a lot more prerequisites in CHPS but that they are generally best practice anyway and we should be doing them regardless.
 16. Tom Liebel asked if they saw any budget increase issues with CHPS. Karen believed they achieved the 62 points with no additional cost. She did say that in Montgomery County they do not air condition gymnasiums but the VA version requires A/C for thermal comfort so that could be a potential additional cost. She's not sure if that is a prerequisite or a just a credit in which case it would not be mandatory. There is also a prerequisite re: daylight and glare that she is not sure they met.
 17. David Lever likes the operations criteria. Karen said they use green cleaning which they do anyway and also anti idling for buses. Most of the operations items are best practice anyway.
 18. The energy standards are EUI based. Prescott Gaylord asked which standard energy is based on. They believe its ASHRAE 90.1 – 2010. Bill Orr said that they are working on energy benchmarking nationally as 8 states don't have any kind of energy codes. You also have the freedom to exceed the standard for credits or to set the State version to a higher standard. Prescott noted that Maryland has adopted IECC 2012 so it would have to meet or exceed this code.
 19. David Lever likes the lower cost and responsiveness/handholding available especially for smaller school systems that just don't have the staff to deal with LEED.
- Q. Bill Orr asked what the next step is and what the process is. Tom Liebel said that the Council is working on the IgCC right now but that we could look at it later in the year. The Council would need to review the planned Maryland version and recommend it to the Secretaries of DGS and DBM for their approval. Bill asked if we saw any show stoppers as they don't want to spend the time developing the local version and then get stopped if we see any issues now.
1. David Lever and Anja could look at the regional version. The Virginia version might be able to be expanded into a mid-Atlantic regional version. D.C. is also interested and possibly Delaware too. Might be efficient for MD to work with these other states and D.C. this fall.
 2. Tom likes the adaptability to local needs and asked David to check with the school districts and get their feedback.
 3. Anja thinks the existing schools portions are much needed here.
 4. Tom noted that by law it would likely provide the choice of LEED or CHPS. He asked Karen if Montgomery County is definitely interested. She said she is working on a strategic report which is due soon.
 5. Prescott asked if there have been any showstoppers in other states. Bill Orr said that Ohio chose to go with LEED exclusively but doesn't think there were any particular issues. It was just a choice. He has not seen any technical showstoppers.
- R. Laura Anderson asked how existing schools are captured.
1. David Lever said at this time it would be voluntary unless it was a major renovation. There might be interest but no compulsion. He likes the indoor environmental aspects.
 2. Bill Orr said that there are 2 programs for existing schools.

- a. Major renovations which would need enough scope including upgrades of at least two major systems (HVAC and lighting for example)
 - b. They are also working on a building upgrade system.
 - c. They also have a National Operations Scorecard that can be used without a local version. They have actually included student teams to be involved in the measurements and are currently talking with Baltimore City schools on this.
- S. This concluded the presentation on CHPS.

IV. The Council resumed its review and study of the IgCC.

A. Chapter 7 was discussed by Laura Armstrong of MDE.

1. Laura said that MDE focused on water quality issues mostly - especially the use of collected water for use as potable water. They had a lot of issues with this. They also had received some comments from DGS and the USM. Stephen Gilliss reiterated his previous suggestion that this entire section on collection of water for re-use as potable water simply be stricken as not in the interest of the State. He noted that this is a national code that might find this section useful in states with serious water issues.
2. Grey water use is included in IgCC but not addressed in LEED. Needs to be looked at further. Tom Liebel noted that local jurisdictions have issues with grey water use. Prescott said that he has installed grey water non-potable systems. They have some issues with UV filters/sterilizers but otherwise they're workable. He sees a cistern as not that different from a rural well other than the rural well water is somewhat filtered naturally through the soil and rock.
3. Tom noted that the fixture water use chart is likely workable and that waterless urinals could be used at least as optional in spite of the University's objections to them on maintenance issues. The waterless urinals just wouldn't be mandated.
4. Laura expressed concern about the enforcement and the code official issue. Stephen Gilliss noted that this is the biggest universal issue with most of the IgCC, the lack of a code official.
5. Tom Liebel noted that code officials obviously prefer codes and that they can plan training for them as they come on line. Stephen noted that again, this review is for our use for our state owned building and we will have to solve this unique issue for our use. We will have to figure out a third party enforcement method using perhaps the commissioning agent to verify compliance. Commissioning is required anyway. While we may serve as an example for jurisdictions, they will have to work out their own code enforcement.
6. Laura was also concerned with the water testing requirements in table 707.12.10 on page 64. Joan Kowal noted that local water authorities might also have to be checked with. For example, WSSC doesn't have a standard for grey water. While on one hand they push water conservation, on the other they sell water.
7. Lauren Buckler said that the metering should be much less stringent. Stephen noted that metering of anything other than potable water use from the utility is not that important. Dan Baldwin disagreed and thought that at least grey water could be metered for informational purposes. The more information we have the better we can make decisions.
8. Sean McGuire introduced Terry Martin of DNR and said that they would be taking a look at the section as well.
9. Caroline Varney Alvarado noted that the State does not use the I-code family for plumbing for some archaic reason. They are similar but not the same. Tom Liebel asked if Maryland accepts the I- plumbing code too? Caroline said that the plumbing codes actually reside with DLLR and that we might have to change some references.

10. Laura said that comments received so far do not appear to be conflicting. Each reviewing group can convert their comments to strikes or deletes. She asked if the Chapter 6 summary could be sent to her as an example of the format since it seems to work.
 11. Anja asked all to keep comments simple to use by the designers.
 12. Tom Liebel noted again that the hope is that this modified version of the code would be able to be used by other jurisdictions.
 13. David Lever said that local jurisdictions all do schools and the schools unlike State buildings are reviewed by local code officials. so they might have to adopt this to build schools to State law. Stephen Gilliss noted that if CHPS is approved that won't be an issue.
- B. Anja Caldwell updated the Council on progress with Chapter 8. She expects to be able to report on it as a whole next month.
1. Indoor environmental quality (IEQ) is a challenging section and can be made better than LEED. IgCC is already better to some extent in that it's required whereas LEED has options.
 2. She has reached out to a number of groups which may have an interest in IEQ.
 3. She met with the Maryland Environmental Health Network. Their Children's Health Report is scary showing that cancer and autism in children is increasing. She suggested members read it. Stephen Gilliss will send out the link.
 4. IgCC has mandatory air testing and other requirements that are best practices that we should be doing anyway.
 5. Another of the other best practices includes better access to HVAC systems.
 6. Unfortunately IEQ does not have as much in the way of metrics so it's not as tangible but we have the responsibility to make improvements.
- C. Tom said next month we'll look at the recommendations for Chapter 6 and get into Chapters 8 and 9.

V. Tom opened up the floor for "Once Around the Table".

- A. Sean McGuire announced that he will be leaving DNR to move to Oregon. Next month will be his last meeting.
- B. Laura Armstrong announced that the Maryland Green Registry awards presentation will be next month , June 11, 2013 from 5:30-7:30 PM at the Westin Hotel, Annapolis.
- C. Meg Andrews said that MDOT is doing its own internal review of the IgCC (the previous one was contracted). She is expecting it to be completed by the end of June and will share whatever they come up with.
- D. Dan Baldwin also announced that Matt Power is leaving MDP to run StateStat. A letter is being sent by the MDP Secretary formally announcing that Dan will take over Matt's seat on the Council.

VI. The meeting was adjourned at 12 PM. The next meeting location is scheduled for June 26, 2013 at 10 AM in Room 150 of the Lowe House Office Building

The preceding is intended as a summary only of the discussions held on this meeting date. Council members are requested to review the summary and notify the writer of any errors, omissions or unintended misrepresentations of the discussion.